

Introduction

Urban run-off is a major contributor to stormwater pollution. Pollutants are washed from roadways, footpaths, etc, directly into the stormwater drains and released untreated into local waterways and beaches. Actions such as pouring paints, oils and the like down stormwater drains contributes to pollution that impacts on our environment.

The information provided in this "Fact Sheet" is aimed at giving a better understanding of the impact we have on our environment and what we can do to minimise water pollution occurrences.

The Pollutants

OIL, GREASE AND PETROLEUM

Oil, grease and petroleum products from road surfaces, commercial and industrial processes, service stations, motor repair shops and marine activities are washed into our stormwater system. These substances are toxic to aquatic organisms.

Nutrients

Chemical nutrients such as Nitrogen and Phosphorous from fertilisers and detergents, can cause excessive growth of aquatic vegetation in waterways and can lead to algal blooms. These excessive growths can result in an offensive odour being produced when they begin to decompose. Blue green algae is toxic in high concentration and can result in large fish kills.

Pesticides And Herbicides

Overuse and misuse of household pesticides and garden herbicides (also from Agricultural use) leads to these chemicals being washed into the stormwater system from irrigation or after rainfall. Some pesticides have the potential to bio-accumulate in the food-chain and this ability means they can pose a threat to all animals including humans.

Bacteria And Viruses

Bacteria and viruses enter the stormwater system mainly from sewage overflows, defective sewage systems, illegal connections to stormwater drains and other animal waste washing down in storm events. These pathogens can cause disease from bathing in polluted waters and make shellfish consumption unsafe.

Sedimentation And Suspended Solids

Sediments washed from building sites and subdivision can also have an adverse impact on aquatic ecosystems.

Inorganic Litter

Surface litter including packaging, plastics, aluminium cans, paper and other similar wastes accumulate in waterways to become an eyesore. Litter can also entangle or be eaten by wildlife causing death.

Organic Litter

BOD is a term given to the amount of oxygen that is taken up when organic matter is broken down by bacteria during the process of decomposition. Overloading streams and lakes with organic material (leaves, sticks, garden wastes or food scraps) can lead to large quantities of oxygen being removed from the water. This can also lead to fish kills if water bodies are sufficiently deoxygenated.

How Do I Contribute To The Problem?

Your contribution to stormwater pollution may be:

- Washing your vehicle on the road (detergents containing nutrients wash into stormwater drain);
- Allowing your animal/s to foul the roadway and footpath (washes into drain, contains bacteria and viruses);
- Dumping grass clippings in creeks and the gutter (organic litter);
- Disposing of litter incorrectly (inorganic and organic litter);
- Hosing down paths and driveways, workbays, service areas and the like (oils, grease, litter washed into stormwater system);
- Excessive use of pesticides, herbicides and other chemicals in your home environment and agricultural activities or incorrect disposal;

- Improper treatment of building materials (concrete slurry, mortar, etc. being hosed into the stormwater system and exposed aggregates in particular).
- Incorrect disposal of paint (spent turpentine, excess paint and water from rinsing brushes washed into stormwater system);
- Allowing soil erosion to occur (increasing sedimentation in waterways);
- Excessive use of water in the garden and in the wash down of external paved areas.

How Can I Contribute To The Solution?

The solution can be as simple as:

- Washing your vehicle on a grassed area to absorb detergents, oil and grit washed off the car;
- Collecting animal wastes and disposing of them by placing in garbage or sewage system
- Composting natural litter such as grass clippings, garden cuttings and food scraps.
- Maintaining your vehicle and collecting engine oil leaks in a drip tray until the leak can be fixed.
- Keeping garbage covered and secured;
- Sweeping paths and driveways. Collect the debris and dispose appropriately (ie. leaves and clippings to compost, plastics and rubbish in garbage bin);
- Seeking alternatives to using pesticides, herbicides and chemicals;
- Minimising use of chemicals and use as directed by manufacturer. Dispose of excess chemicals at chemical collection centres when advertised.
- Collecting all building wastes, recycle if possible or dispose at landfill depot;
- Rinsing paint brushes on lawn to absorb paint. Store all used solvents and paint wastes and dispose at chemical collection centre when collection days are advertised.
- Re-vegetating exposed soil surfaces with grass and plants to stabilise and prevent erosion;
- Excavations, stockpiles of sand and soil, and all building sites being protected on the low side by erection of silt fencing to prevent erosion.

These simple steps will reduce the amount of pollutants entering our stormwater drains and waterways, and enhance the natural environment's aesthetic values as well as preserving bio-diversity, wildlife and their habitats.

Legislation

Everyone has a responsibility to protect our environment. Persons who choose to disregard this responsibility may need to defend their actions under one of the following Acts.

- Local Government Act 1993;
- Environmental Planning and Assessment Act 1979
- Protection of the Environment Operations Act 1997

These Acts carry substantial penalties but it is Council's preference to use such action only as a last resort. It is much better that we all "think globally and act locally" to secure a sustainable future.

Disclaimers

This Fact Sheet was believed to be correct at the date of its publication.

This Fact Sheet is for general information purposes only and should not be relied upon for legal advice.